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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,307	10/29/2001	Josef Scharmuller	SCHARMULLER -1 PCT	4882
7590	11/19/2003		EXAMINER	
Collard & Roe 1077 Northern Boulevard Roslyn, NY 11576			ROYAL, PAUL	
			ART UNIT	PAPER NUMBER
			3611	

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,307

Applicant(s)

CHARMULLER, JOSEF

Examiner

Paul Royal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Response to Amendment

1. The amendment filed on 25 August 2003 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 5 recites the broad recitation "Rockwell hardness 5 to 12", and the claim also recites preferably "Rockwell hardness 6" which is the narrower statement of the range/limitation.

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 4 & 6, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Coilbert et al. (US 6,113,125).

Coilbert et al. teaches a coupling device for a towing vehicle and a trailer, the coupling device comprising coupling ball (102) arranged on a coupling carrier (101) and a moulded article (101), having a ball socket (104) and a connecting plate (CPLATE, see Examiner's annotated Figure 2), said moulded article made of a ferrous material and presenting a casting crust at least on the interior of the socket, see claim 8.

Note it is well known that in the production of a cast steel moulded article (hitch coupler body) a crust forms during the casting process.

Further, the Examiner points out that Colibert et al. (US 6,113,125) teaches the ball socket 101 is made of "cast steel" and the invention of Colibert et al. includes a cam pin made of "polished steel". Colibert et al. appears to distinguish "cast steel" from "polished steel" in a manner which indicates the interior of the socket is not polished and retains the crust from the casting process. For the forgoing reasons the interior of the ball socket of Colibert et al. is understood include the crust formed during the casting process.

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Note Coilbert et al. teaches the full invention is shown in Figure 7 and the moulded article is understood to be part of the coupling carrier/full invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coilbert et al. (US 6,113,125).

Coilbert et al., as applied to claim 4 teaches all the claim limitations except wherein the ball socket has a lesser hardness than the coupling ball.

It is understood to be well known to use a ball socket Rockwell hardness which is less than the hardness of the coupling ball to selectively control wear.

Response to Arguments

5. Applicant's arguments filed 25 August 2003 have been fully considered but they are not persuasive.

Applicant argues applicant has discovered a nonobvious use for the surface crust of the hitch socket which is contradictory to the understanding of a person of ordinary skill in the art where the nonobvious use is that by leaving the

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post casting crust on the interior of the hitch socket, the [load] carrying capacity of the coupling device is enhanced.


Applicant should provide evidence, such as data which correlates load carrying capacity to the interior socket surface finish (including data where the surface has the claimed crust), which clearly supports applicant's assertion.


Further, the Examiner points out that Colibert et al. (US 6,113,125) teaches the ball socket 101 is made of "cast steel" and the invention of Colibert et al. includes a cam pin made of "polished steel". Colibert et al. appears to distinguish "cast steel" from "polished steel" in a manner which indicates the interior of the socket is not polished and retains the crust from the casting process. For the forgoing reasons the interior of the ball socket of Colibert et al. is understood include the crust formed during the casting process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Royal whose telephone number is 703-308-8570. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 703-308-0629. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.


P. Royal
November 12, 2003

Paul Royal
Examiner
Art Unit 3611

LESLEY D. MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600